

8.3136  
**SEARCH REQUEST FORM**

Requestor's

Name:

77468  
Kathleen Kerr

Serial

Number:

09/768,479

Date:

11/27/02

Phone:

305-122-5520

Art Unit:

1652

**Search Topic:**

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Search for STR 10, w/ any  
linker

Point of Contact  
Susan Hanley  
Technical Info. Specialist  
CM1 6B05 Tel: 305-4053

**STAFF USE ONLY**

Date completed:

12/27

Searcher:

Hanley

Terminal time:

27

Elapsed time:

30

CPU time:

Total time:

Number of Searches:

Number of Databases:

**Search Site**

STIC

CM-1

Pre-S

**Type of Search**

N.A. Sequence

A.A. Sequence

2 Structure

Bibliographic

**Vendors**

IG

\$57 STN

Dialog

APS

Geninfo

SDC

DARC/Questel

Other

=&gt; D HIS L100-L108

(FILE 'HCAPLUS' ENTERED AT 14:31:54 ON 27 DEC 2002)

FILE 'REGISTRY' ENTERED AT 14:57:31 ON 27 DEC 2002

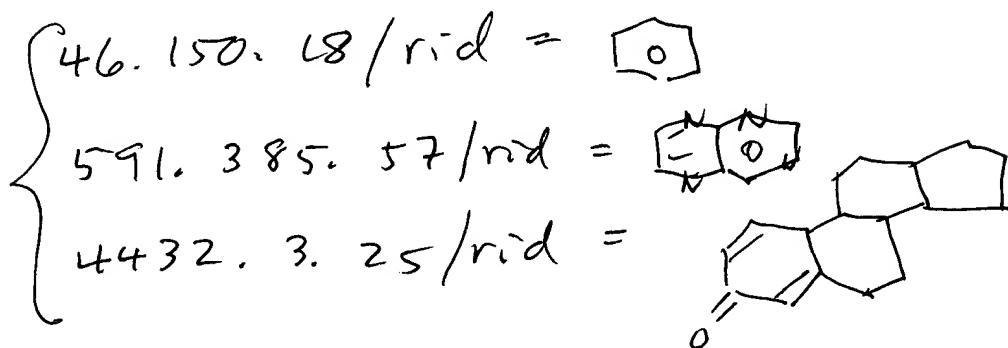
L100 1 S 389085-38-5  
 L101 25 S 46.150.18/RID AND 591.385.57/RID AND 4432.3.25/RID 25 cpds  
 L102 24 S L101 NOT L100 24 (subtract out applicants)

FILE 'HCAPLUS' ENTERED AT 14:59:50 ON 27 DEC 2002

L103 6 S L102 6 cites  
 L104 12885 S DIMERIZATION+NT/CT  
 L105 27680 S DEXAMETHASON?  
 L106 11846 S ?METHOTREXAT?  
 L107 3 S L104 AND L105 AND L106  
 L108 0 S L107 NOT L103 no other cites

} searching by controlled terminology

RID = ring identifiers



these 3 ring systems must be in the same cpd, connected in any manner w/ any other atoms. pretty broad - but only 25 cpds (L101)

KERR 09/768,479

=> D QUE L103

L100	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	389085-38-5
L101	25	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	46.150.18/RID AND 591.385.57/ RID AND 4432.3.25/RID
L102	24	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	L101 NOT L100
L103	6	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L102

=&gt; d ibib abs hitstr 1

L103 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:869480 HCAPLUS  
 DOCUMENT NUMBER: 137:334940  
 TITLE: Covalent chemical inducers of protein dimerization and  
 their uses in high throughput binding screens  
 Cornish, Virginia W.  
 INVENTOR(S): USA  
 PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S.  
 SOURCE: Pat. Appl. 2002 59,272.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002168685	A1	20021114	US 2002-56874	20020124
US 2002168737	A1	20021114	US 2001-768474	20010124
			US 2001-768474	A2 20010124

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 137:334940

AB Described are compds. having the formula: where H1 is a substrate capable of selectively binding to a first receptor; where H2 is a substrate capable of selectively binding to and selectively forming a covalent bond with a second receptor; and wherein Y is a moiety providing a covalent linkage between H1 and H2, which may be present or absent, and when absent, H1 is covalently linked to H2. Also described are uses of the compds. for in vivo screening of compds. and proteins. In this compd., the 1st ligand-receptor pair is replaced with a small mol.-receptor pair that will form an irreversible covalent linkage, making a system with only 3 non-covalent interactions. Such an approach allows for the screening of small mols. to identify their cellular targets. This covalent system is used for screening the ligand receptor interaction, which used to require laborious work by using the photo cross linking, radio labeled ligand binding and affinity chromatog. techniques.

IT **351419-43-7**, L-Homocysteine, N-[4-[[[2,4-diamino-6-pteridinyl)methyl)methylamino]benzoyl]-S-[8-[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]octyl]-

**351419-44-8**, L-Homocysteine, N-[4-[[[2,4-diamino-6-pteridinyl)methyl)methylamino]benzoyl]-S-[10-[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]decyl]-

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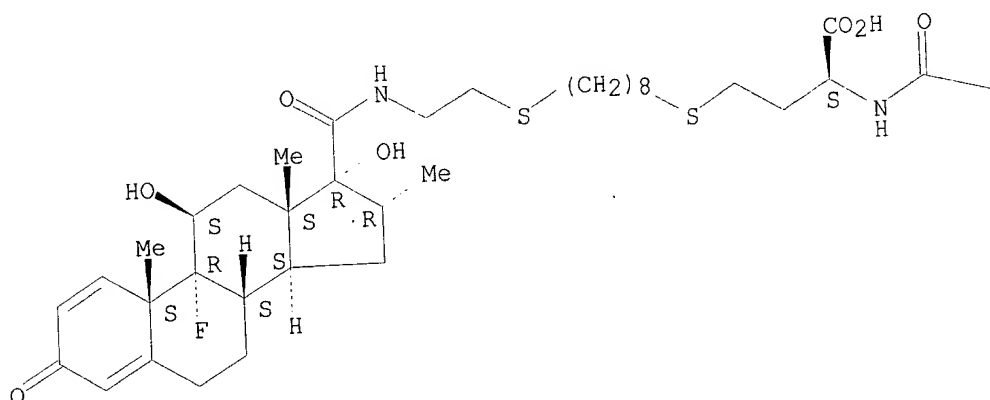
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9-fluoro-11,17-dihydroxy-16-methyl-3-oxoestra-1,4-dien-17-yl]carbonyl]amino]-1-oxooctyl]amino]-8-oxo-, (6R,7R)-  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (covalent chem. inducers of protein dimerization and uses in high throughput binding screens)

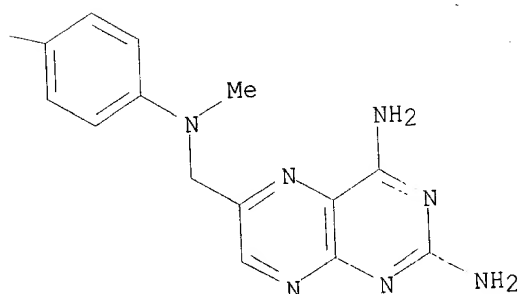
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 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



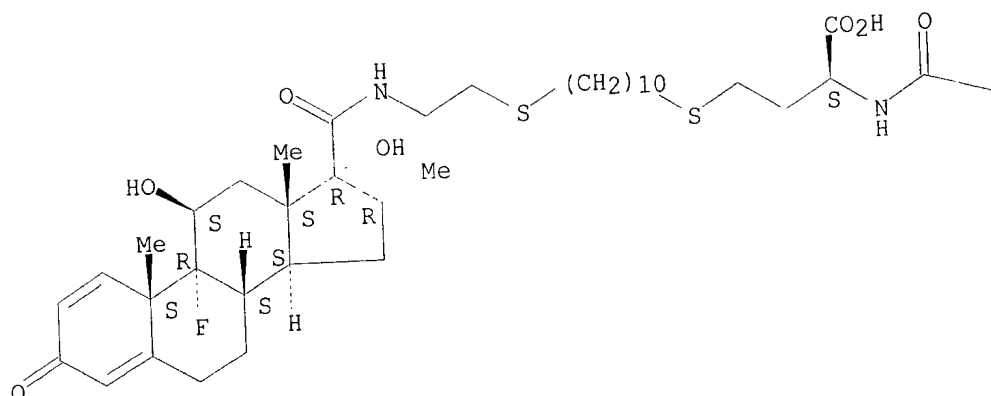
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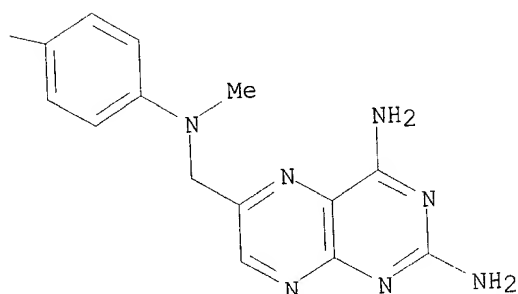
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 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



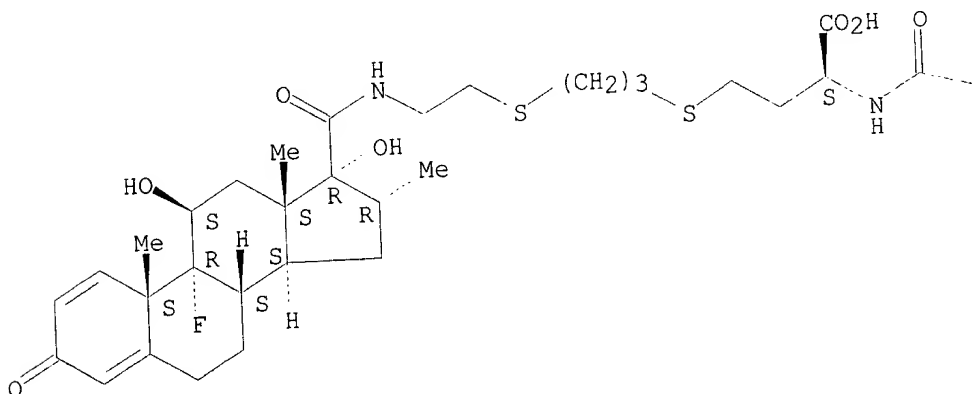
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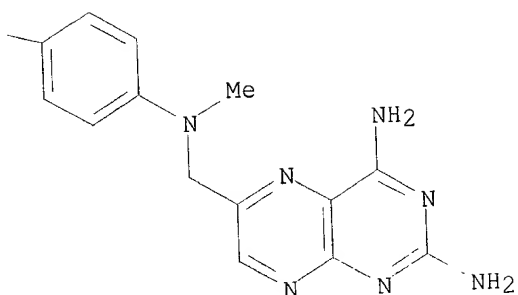
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 CN L-Homocysteine, N-[4-[[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-S-[3-[[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



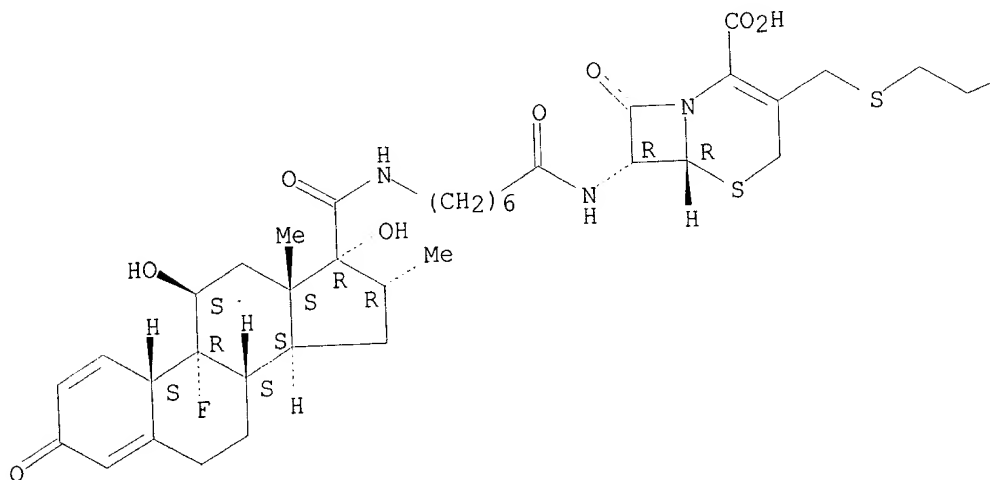
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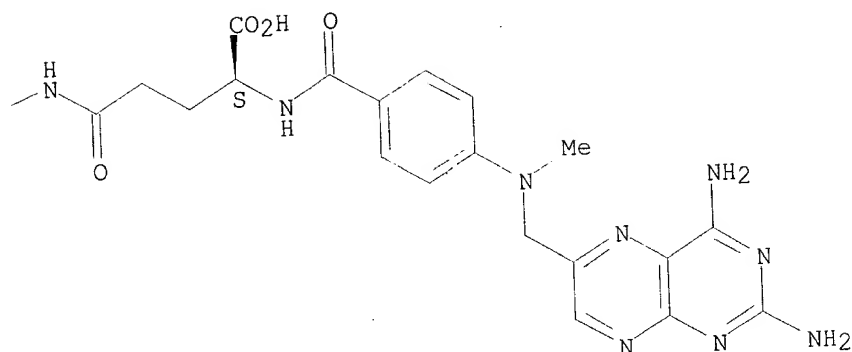


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 oxobutyl]amino]ethyl]thio]methyl]-7-[[7-[[[(11.beta.,16.alpha.,17.alpha.)-  
 9-fluoro-11,17-dihydroxy-16-methyl-3-oxoestra-1,4-dien-17-  
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 NAME)

Absolute stereochemistry.

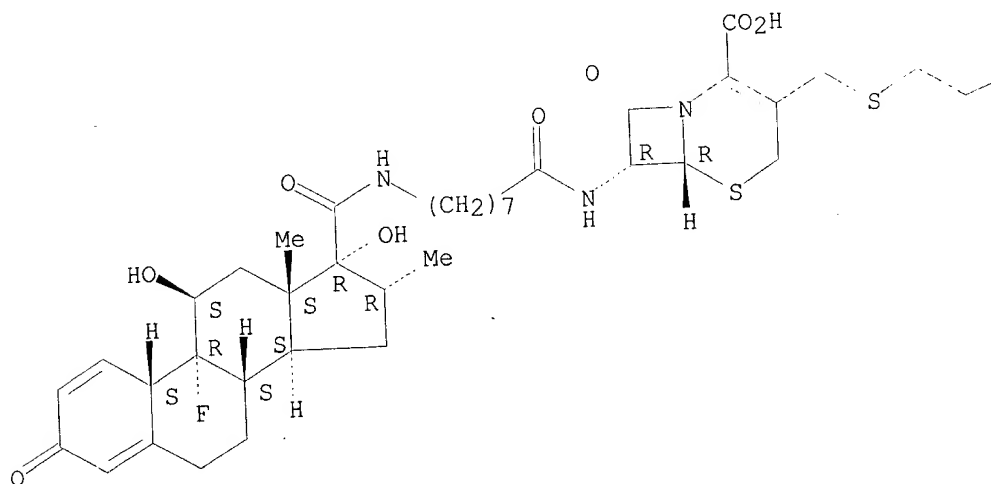
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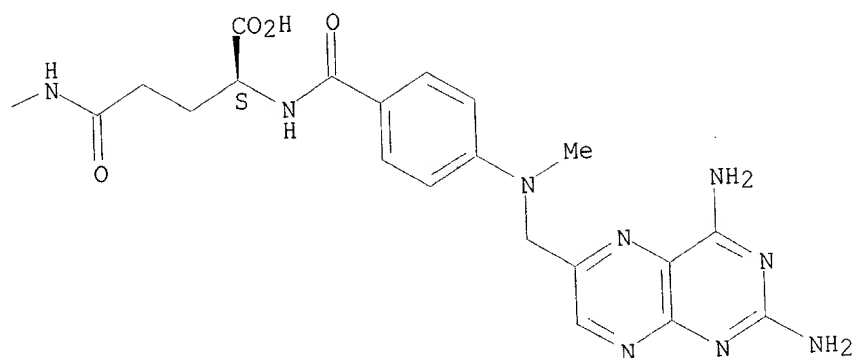


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 oxobutyl]amino]ethyl]thio]methyl]-7-[[8-[[[(11.β.,16.α.,17.α.)-  
 9-fluoro-11,17-dihydroxy-16-methyl-3-oxoestra-1,4-dien-17-  
 yl]carbonyl]amino]-1-oxooctyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.







=&gt; d ibib abs hitstr 2

L103 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:696096 HCAPLUS  
 DOCUMENT NUMBER: 137:197882  
 TITLE: Three hybrid assay system  
 INVENTOR(S): Becker, Frank; Come, John H.; Kley, Nikolai  
 PATENT ASSIGNEE(S): Gpc Biotech Ag, Germany; Gpc Biotech Inc.  
 SOURCE: PCT Int. Appl., 253 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002070662	A2	20020912	WO 2002-US6677	20020304
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2001-272932P P	20010302
			US 2001-278233P P	20010323
			US 2001-329437P P	20011015

AB The invention concerns compns. and methods for isolating ligand binding polypeptides for a user-specified ligand, and for isolating small mol. ligands for a user-specified target polypeptide using an improved class of hybrid ligand compds. In general the invention provides a three hybrid assay system and reagents for the identification of the protein binding partner of a selected small pharmaceutical agent. Likewise, the invention also provides methods and reagents for the identification of a small pharmaceutical agent binding partner of a selected protein. Once detected, the invention further provides methods for monitoring the interaction of the pharmaceutical agent and its protein binding partner that can be used to detect competitors of the interaction.

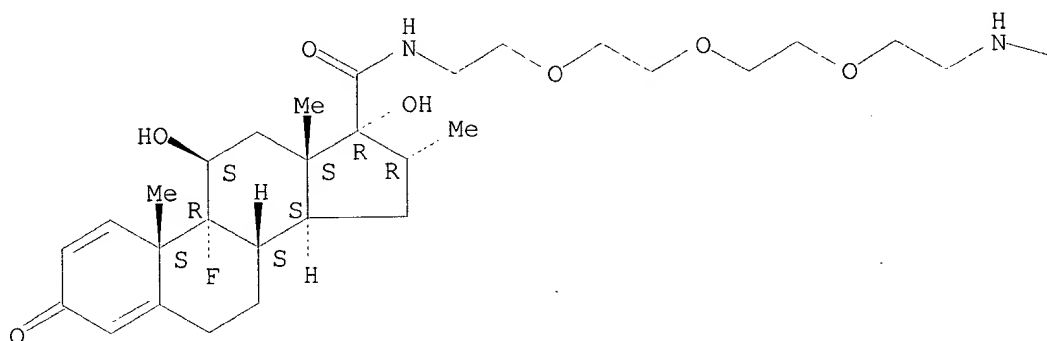
IT 452913-18-7P 454221-45-5P, GPC 285937  
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 (three hybrid assay system)

RN 452913-18-7 HCAPLUS

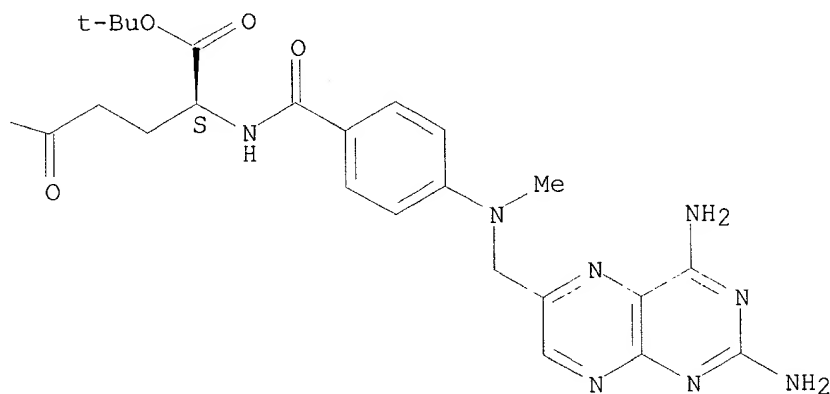
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

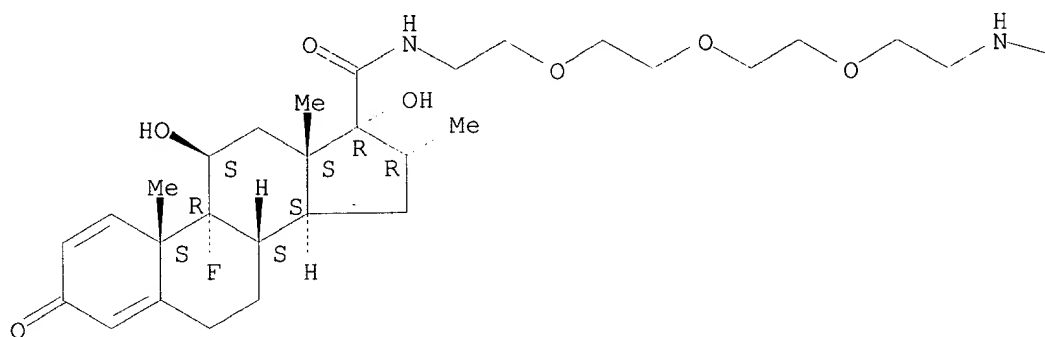


RN 454221-45-5 HCAPLUS

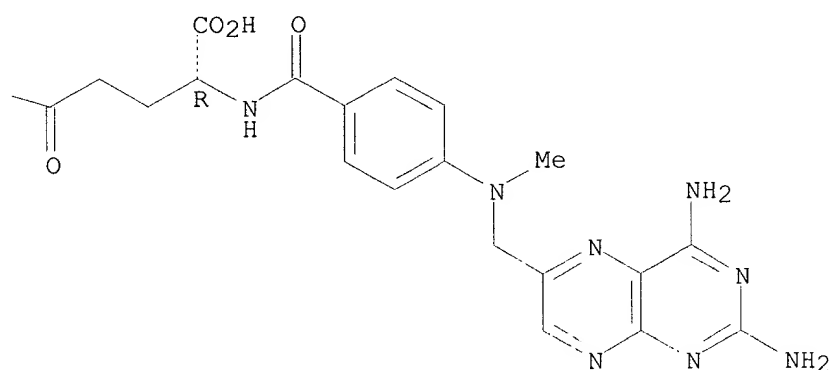
CN 5,8,11-Trioxa-2,14-diazanonadecan-19-oic acid, 18-[[4-[[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]-1-[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrost-1,4-dien-17-yl]-1,15-dioxo-, (18S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



=&gt; d ibib abs hitstr 3

L103 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:575201 HCAPLUS  
 DOCUMENT NUMBER: 137:121947  
 TITLE: Covalent chemical inducers of protein dimerization and  
 their uses in high throughput binding screens  
 INVENTOR(S): Cornish, Virginia W.  
 PATENT ASSIGNEE(S): The Trustees of Columbia University In the City of New  
 York, USA  
 SOURCE: PCT Int. Appl., 98 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059272	A2	20020801	WO 2002-US2199	20020124
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002168737	A1	20021114	US 2001-768474	20010124

PRIORITY APPLN. INFO.: US 2001-768474 A2 20010124

AB The invention concerns compds. having the formula: H1-Y-H2 where H1 is a substrate capable of selectively binding to a first receptor; where H2 is a substrate capable of selectively binding to and selectively forming a covalent bond with a second receptor; and wherein Y is a moiety providing a covalent linkage between H1 and H2, which may be present or absent, and when absent, H1 is covalently linked to H2. Also described are uses of the compds. for in vivo screening of compds. are proteins. In this compd., the 1st ligand-receptor pair is replaced with a small mol.-receptor pair that will form an irreversible covalent linkage, making a system with only 3 non-covalent interactions. Such an approach allows for the screening of small mols. to identify their cellular targets. This covalent system is used for screening the ligand receptor interaction, which used to require laborious work by using the photo cross linking, radio labeled ligand binding and affinity chromatog. techniques.

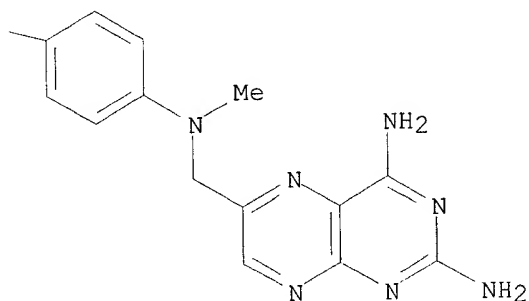
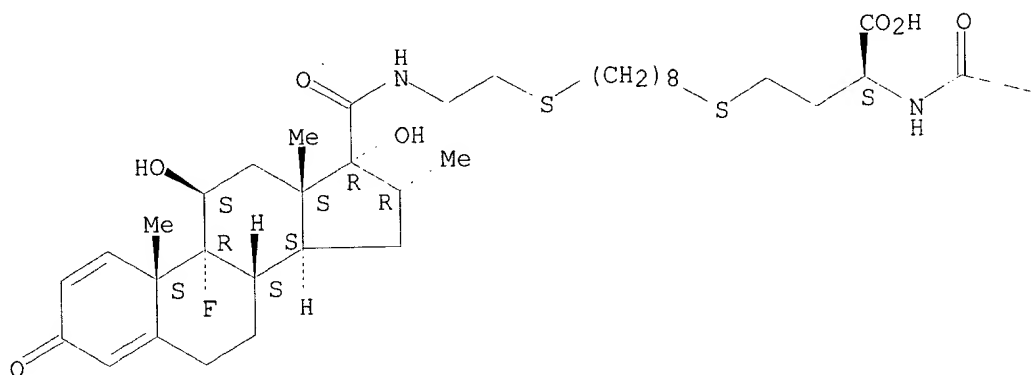
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RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (covalent chem. inducers of protein dimerization and uses in high  
 throughput binding screens)

RN 351419-43-7 HCAPLUS

CN L-Homocysteine, N-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-S-[8-[[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]octyl]]-(9CI) (CA INDEX NAME)

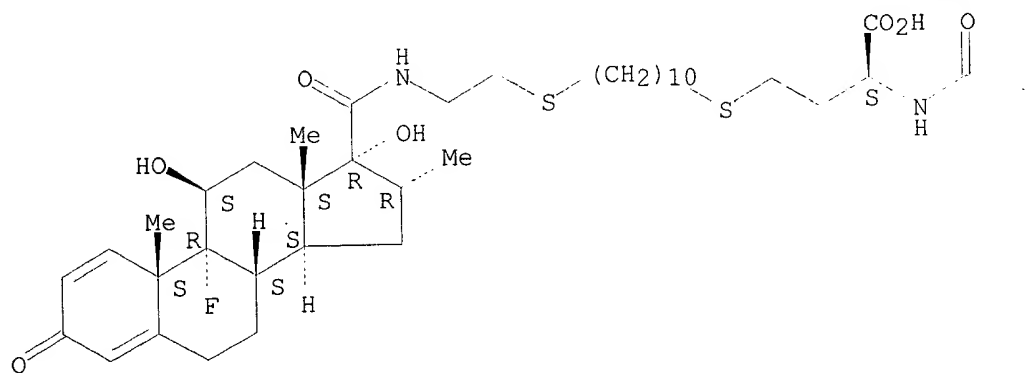
Absolute stereochemistry.



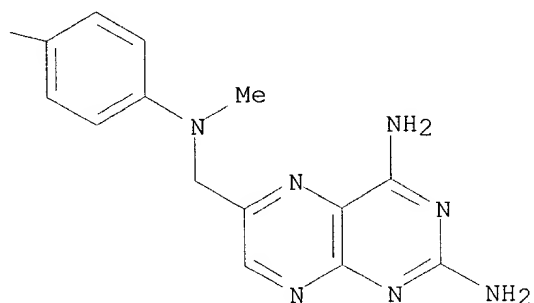
RN 351419-44-8 HCAPLUS

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Absolute stereochemistry.



PAGE 1-B

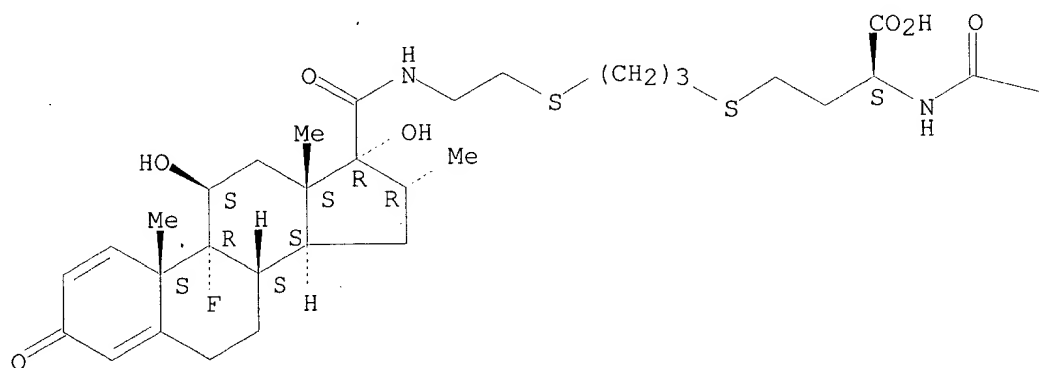


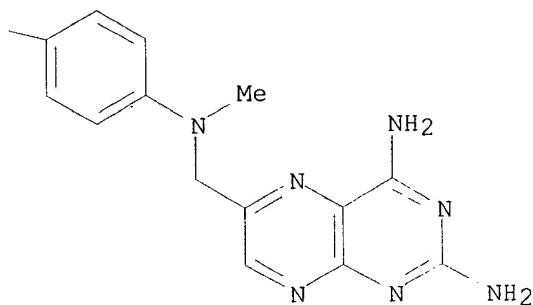
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Absolute stereochemistry.

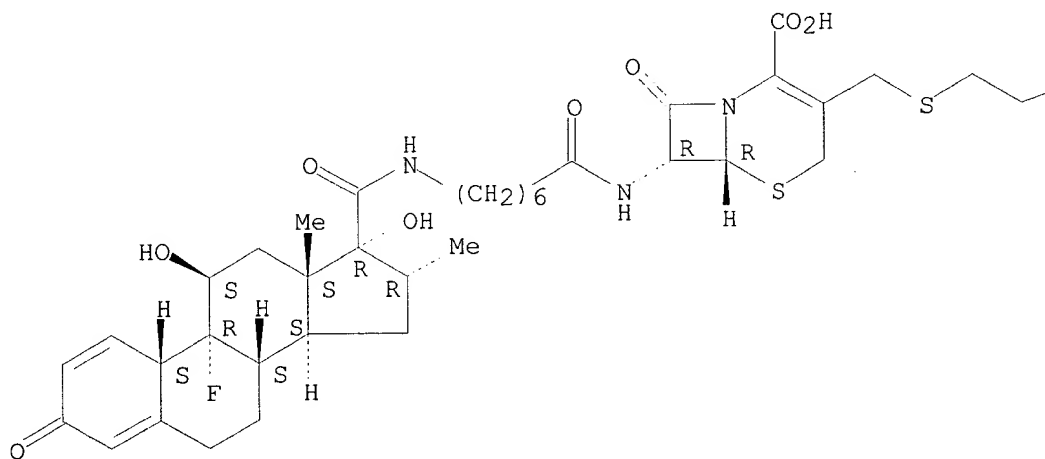
PAGE 1-A



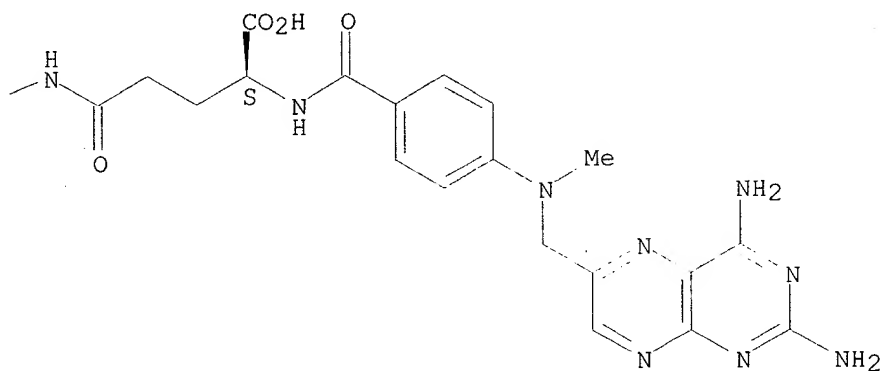


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 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
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 oxobutyl]amino]ethyl]thio]methyl]-7-[[7-[[[(11.beta.,16.alpha.,17.alpha.)-  
 9-fluoro-11,17-dihydroxy-16-methyl-3-oxoestra-1,4-dien-17-  
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 NAME)

Absolute stereochemistry.

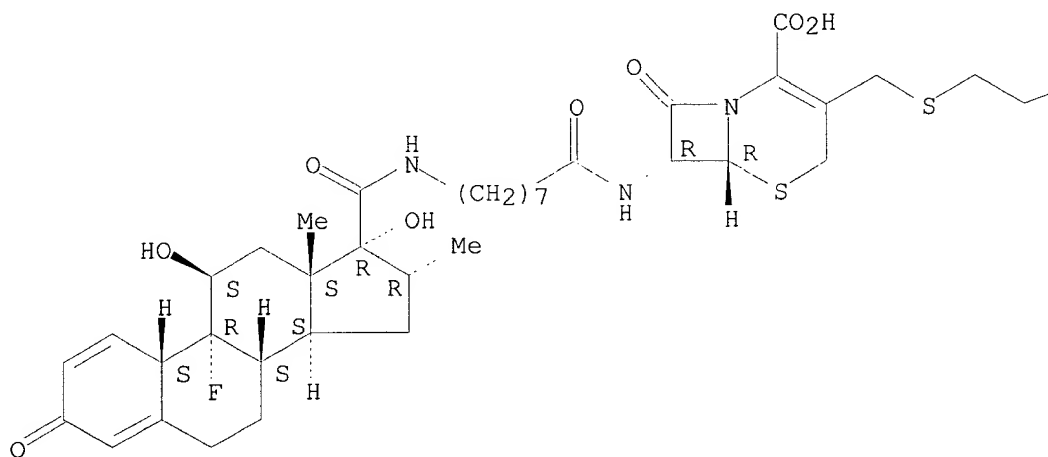


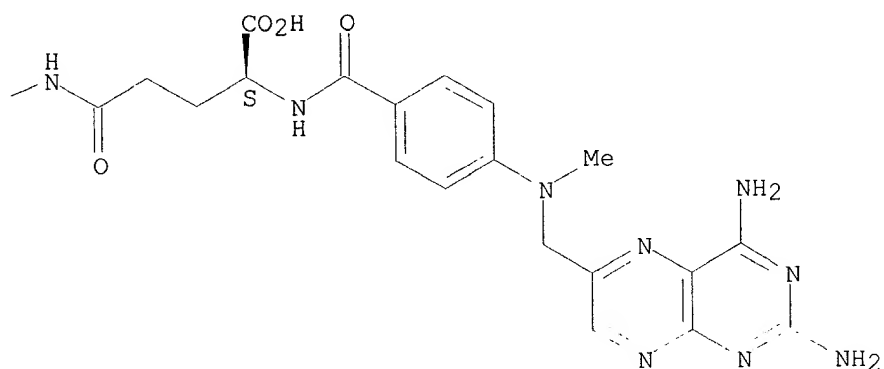




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 NAME)

Absolute stereochemistry.





=&gt; d ibib abs hitstr 4

L103 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:31914 HCAPLUS

DOCUMENT NUMBER: 136:98820

TITLE: Yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization

INVENTOR(S): Cornish, Virginia W.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 490,320.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002004202	A1	20020110	US 2001-768479	20010124
PRIORITY APPLN. INFO.:			US 2000-490320	A2 20000124

AB The disclosed invention relates to the evolution of enzymes in vivo, and drug screening in vivo through the use of chem. inducers of protein dimerization. The subject invention provides a compd. having the formula: H1--X--B-Y--H2 wherein each of H1 and H2 may be the same or different and capable of binding to a receptor which is the same or different; wherein each of X and Y may be present or absent and if present, each may be the same or different spacer moiety; and wherein B is an enzyme cleavable moiety. This invention also provides a method of screening proteins for the ability to catalyze bond cleavage or bond formation, comprising the steps of: (a) providing a cell that expresses a pair of fusion proteins which upon dimerization change a cellular readout; (b) providing the compd. of the invention which dimerizes the pair of fusion proteins, said compd. comprising two portions coupled by a bond that is cleavable or formed by the protein to be screened; and (c) screening for the cellular readout, wherein a change the cellular readout indicates catalysis of bond cleavage or bond formation by the protein to be screened. However, it has not heretofore been suggested to use small mol. induced protein dimerization to screen for catalysis in vivo., and specifically, it has not been suggested to use an enzyme cleavable moiety to link two mols. to dimerize proteins. This invention provides proteins de novo with prescribed binding and catalytic properties and permits screening cDNA libraries based on biochem. function. Practically, we believe that powerful screens in combination with existing randomization techniques will make it possible to take an existing protein fold and evolve it into an enzyme with a new function generating useful catalysts for the pharmaceutical and chem. industries. Since the screen is done in vivo and in both prokaryotes and eukaryotes, the methodol. can be applied to functional genomics and drug discovery. A new chem. inducer of dimerization (CID) was recently developed in Professor Cornish's lab, which uses a heterodimer of methotrexate (MTX) and dexamethasone (DEX) which, when placed in the yeast three-hybrid system, reconstitutes transcription of the lacZ gene. The effects of altering the structure of the DEX-MTX CID and the protein chimeras in the three-hybrid assay were investigated. It was obsd. that all DEX-MTX CIDs, except the DEX-MTX CID with the shortest chem. linker, showed the ability to induce .beta.-galactosidase levels at levels 400% above strains possessing no CID. The DEX-MTX CIDs showed little or no increase in

.beta.-galactosidase levels above background levels in strains where dihydrofolate reductase (DHFR) from E. coli was replaced by DHFR from murine. The three-hybrid system did show some directional preference to the way in which the receptors were fused to the DNA binding domain and the activation domain. These studies have led to a better understanding of the factors that are important in activating transcription in the DEX-MTX yeast three-hybrid system.

IT 389085-33-0 389085-34-1 389085-35-2  
389085-36-3 389085-37-4 389085-39-6  
389085-41-0 389085-42-1

RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

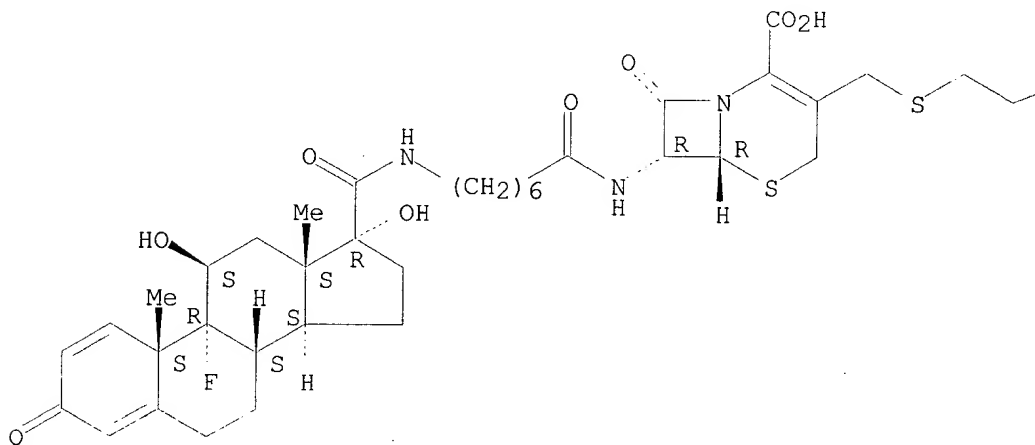
(yeast three-hybrid system for in vivo drug screening and enzyme evolution using chem. inducers of dimerization)

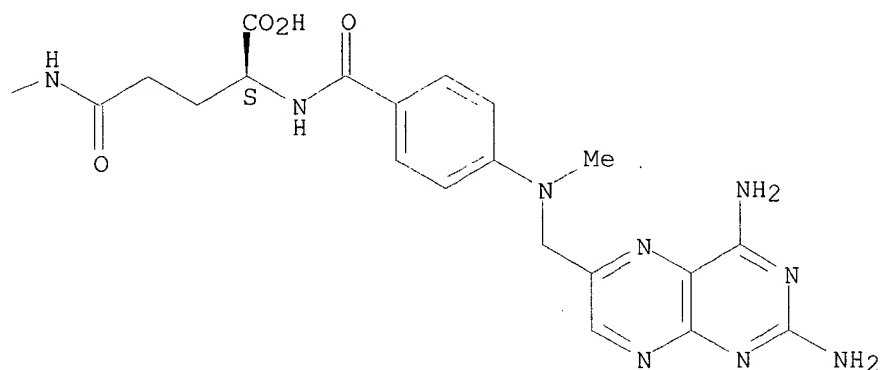
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Absolute stereochemistry.

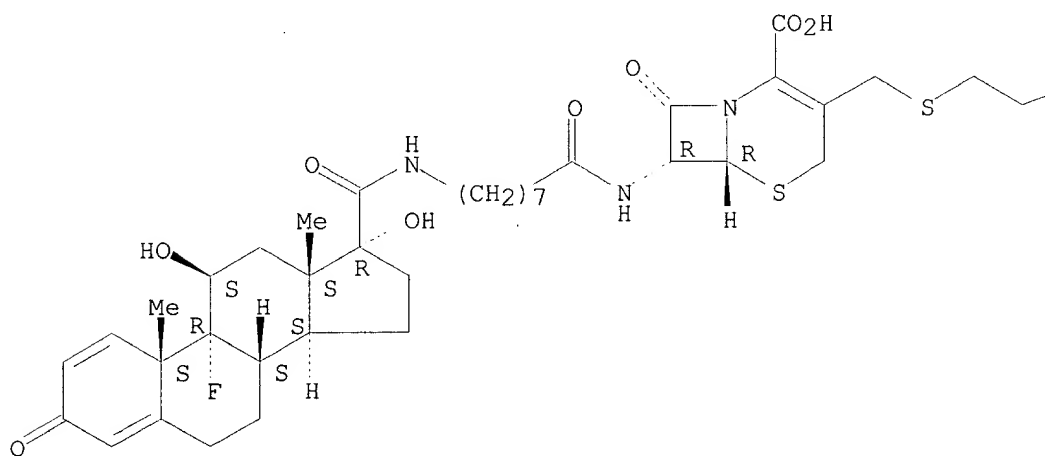
PAGE 1-A



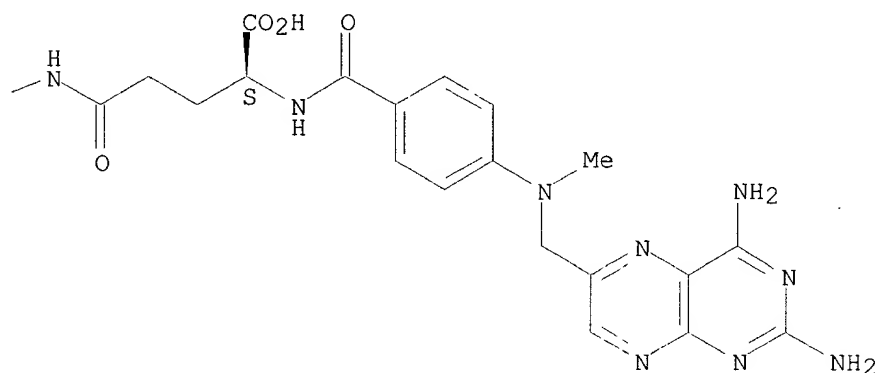


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 oxobutyl]amino]ethyl]thio]methyl]-7-[[8-[[[(11.beta.,17.alpha.)-9-fluoro-  
 11,17-dihydroxy-3-oxoandrost-1,4-dien-17-yl]carbonyl]amino]-1-  
 oxooctyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-B

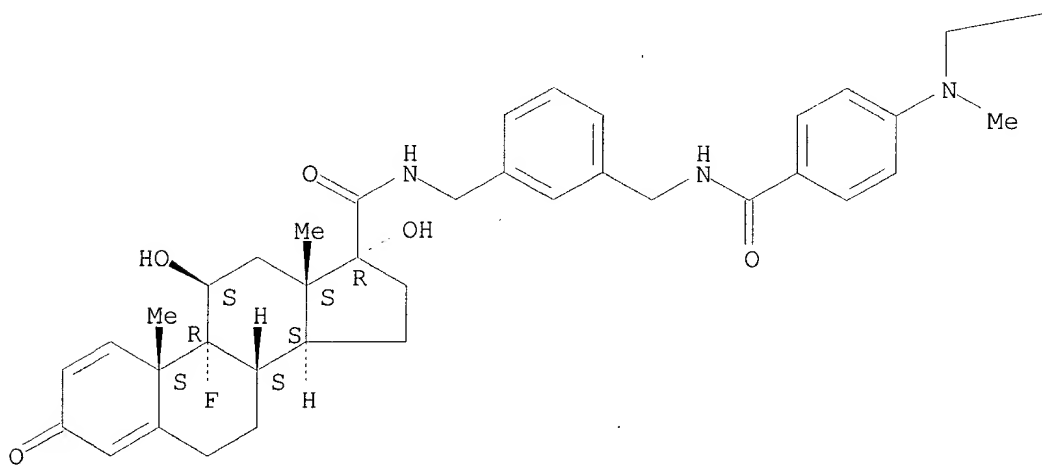


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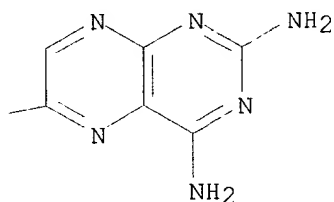
CN Androsta-1,4-diene-17-carboxamide, N-[[[3-[[[4-[[[2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]methyl]phenyl]methyl]-9-fluoro-11,17-dihydroxy-3-oxo-, (11.β.,17.α.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

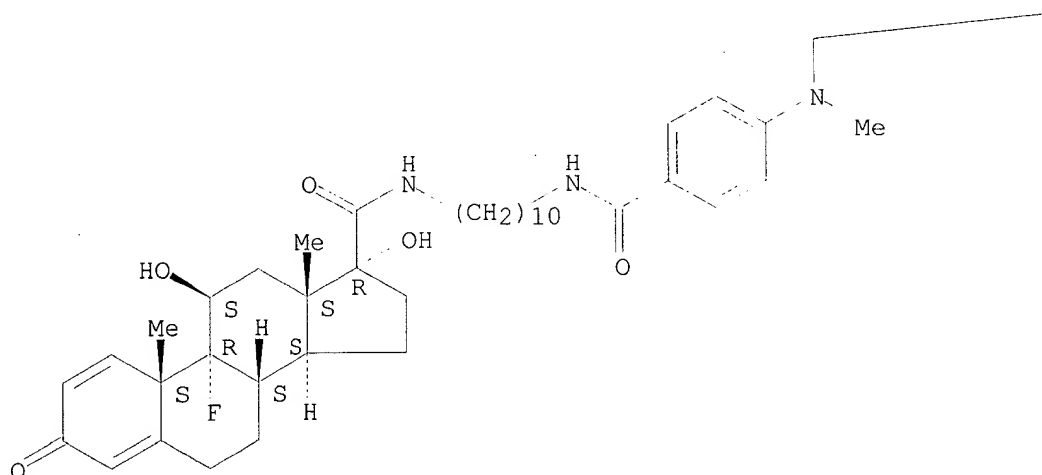


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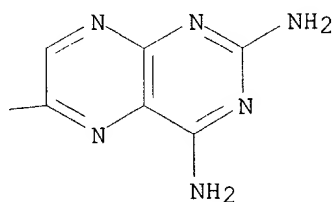
CN Androsta-1,4-diene-17-carboxamide, N-[10-[4-[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]amino]decyl]-9-fluoro-11,17-dihydroxy-3-oxo-, (11.beta.,17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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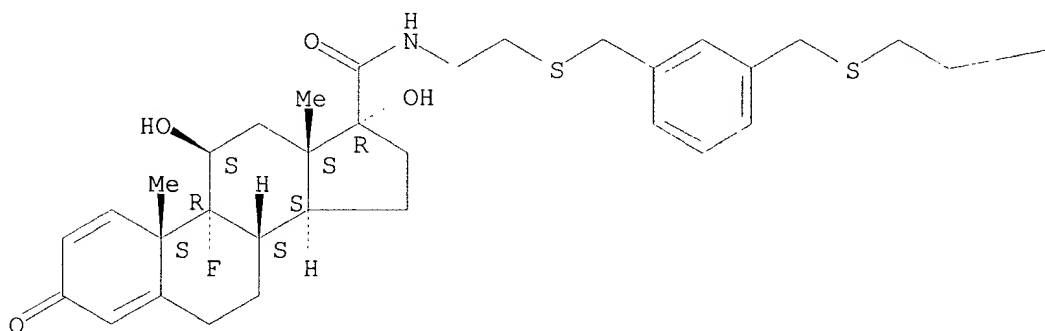
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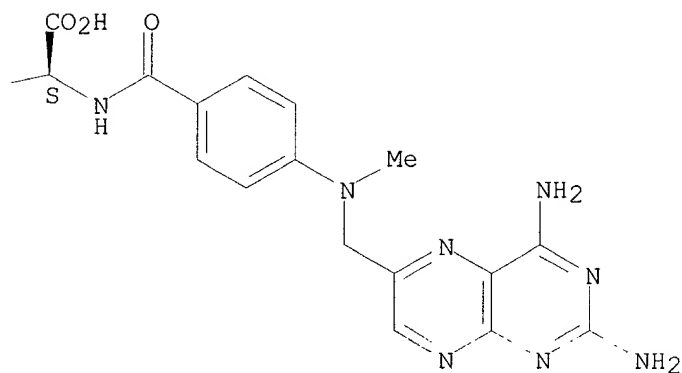
oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]methyl]phenyl]methyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



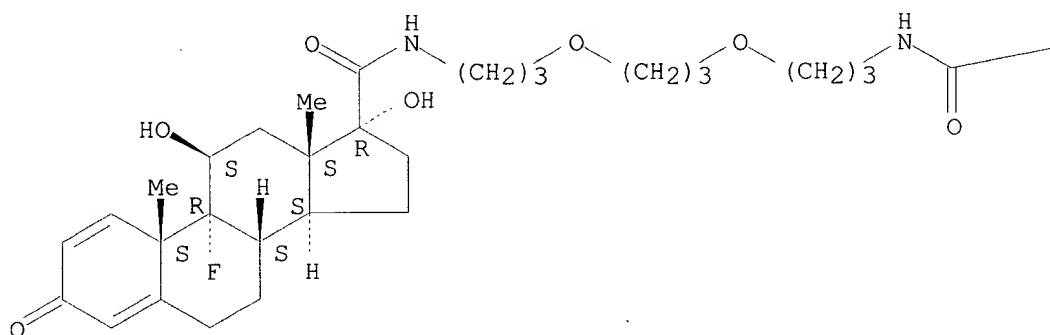
RN 389085-39-6 HCAPLUS

CN Androsta-1,4-diene-17-carboxamide, N-[3-[3-[3-[[4-[(2,4-diamino-6-  
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NAME)

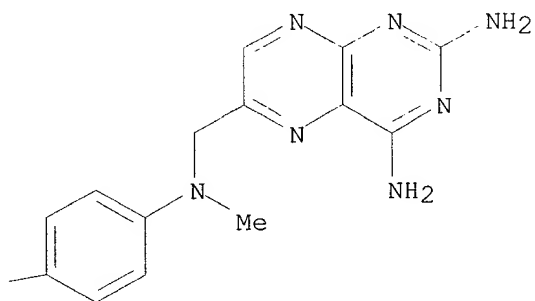
Absolute stereochemistry.



PAGE 1-A



PAGE 1-B

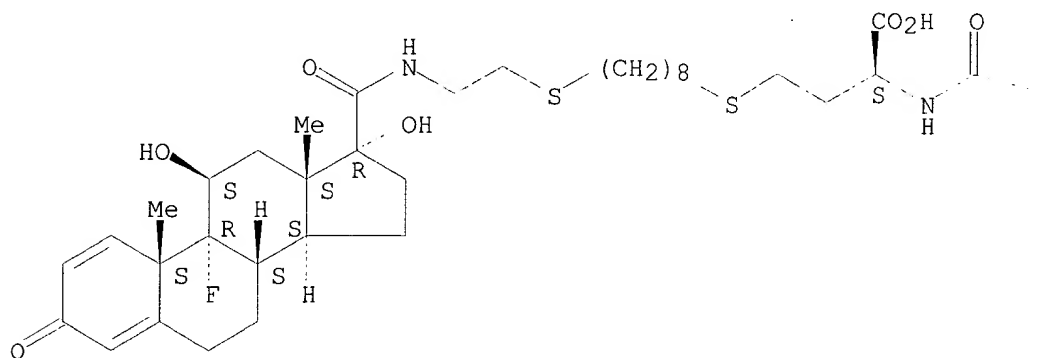


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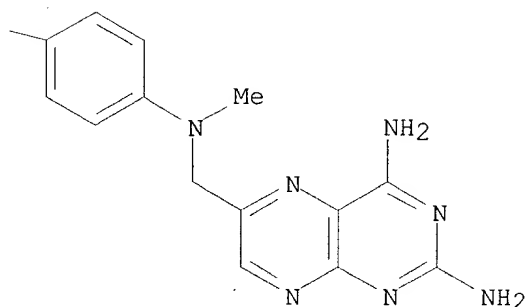
CN L-Homocysteine, N-[4-[[[(2,4-diamino-6-pteridiny]methyl)methylamino]benzoyl]-S-[8-[[2-[[[(11.beta.,17.alpha.)-9-fluoro-11,17-dihydroxy-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]octyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

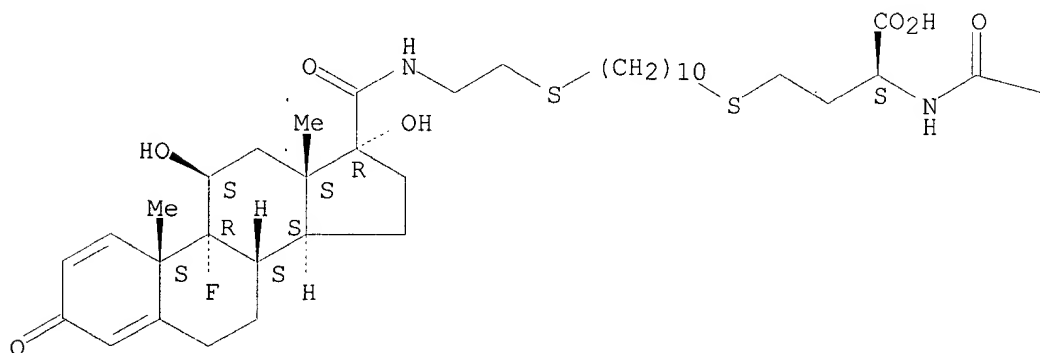


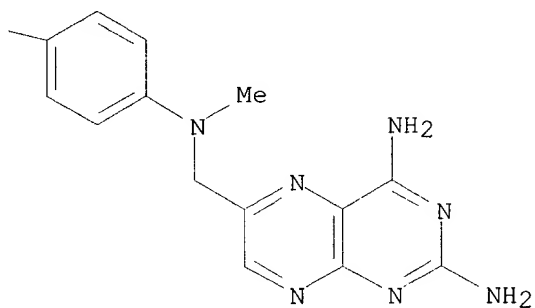
RN 389085-42-1 HCAPLUS

CN L-Homocysteine, N-[4-[[[(2,4-diamino-6-pteridiny]methyl)methylamino]benzoyl]-S-[10-[[2-[[[(11.beta.,17.alpha.)-9-fluoro-11,17-dihydroxy-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]decyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





=&gt; d ibib abs hitstr 5

L103 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2001:545747 HCAPLUS  
 DOCUMENT NUMBER: 135:133932  
 TITLE: An in vivo screen using chemical inducers of  
 dimerization  
 INVENTOR(S): Cornish, Virginia W.  
 PATENT ASSIGNEE(S): The Trustees of Columbia University in the City of New  
 York, USA  
 SOURCE: PCT Int. Appl., 123 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001053355	A1	20010726	WO 2001-US2285	20010124
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1254179	A1	20021106	EP 2001-942644	20010124
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PRIORITY APPLN. INFO.:			US 2000-490320	A 20000124
			WO 2001-US2285	W 20010124

AB The subject of the invention provides a compd. having the formula:  
 H1-X-B-Y-H2, wherein each of H1 and H2 may be the same or different and capable of binding to a receptor which is the same or different; wherein each of X and Y may be present or absent and if present, each may be the same or different spacer moiety; and wherein B is an enzyme cleavable moiety. Said compds. can be called chem. inducers of dimerization. This invention also provides a method of screening proteins for the ability to catalyze bond cleavage.

IT 282092-90-4 351419-37-9 351419-38-0  
 351419-39-1 351419-40-4 351419-41-5  
 351419-42-6 351419-43-7 351419-44-8

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

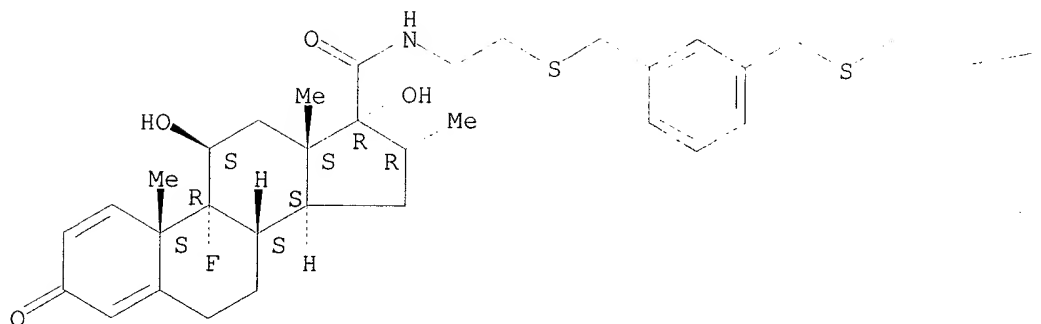
(compds. comprising receptor-binding moiety, spacer and enzyme cleavable moiety for screening drugs and proteins capable of catalyze bond cleavage)

RN 282092-90-4 HCAPLUS

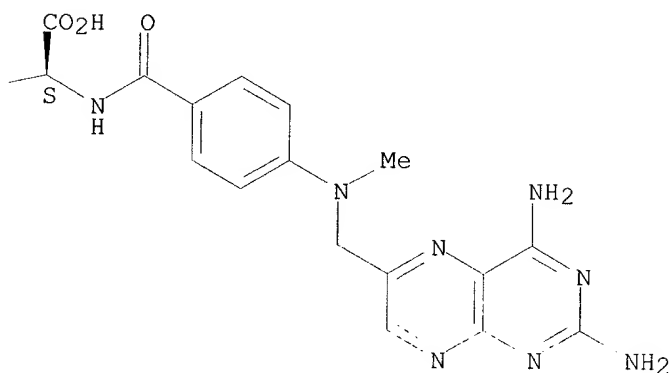
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Absolute stereochemistry.

PAGE 1-A



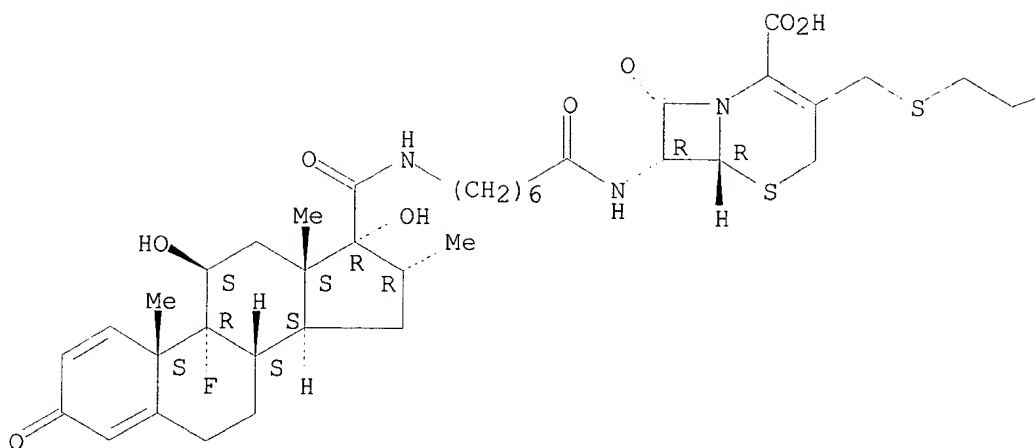
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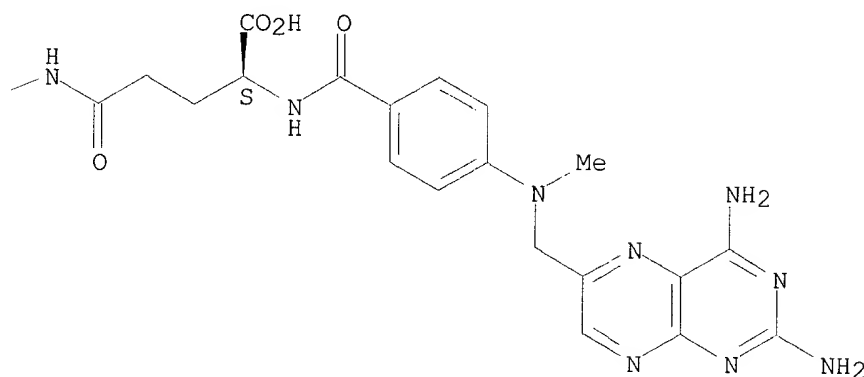
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 9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrost-1,4-dien-17-  
 yl]carbonyl]amino]-1-oxoheptyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

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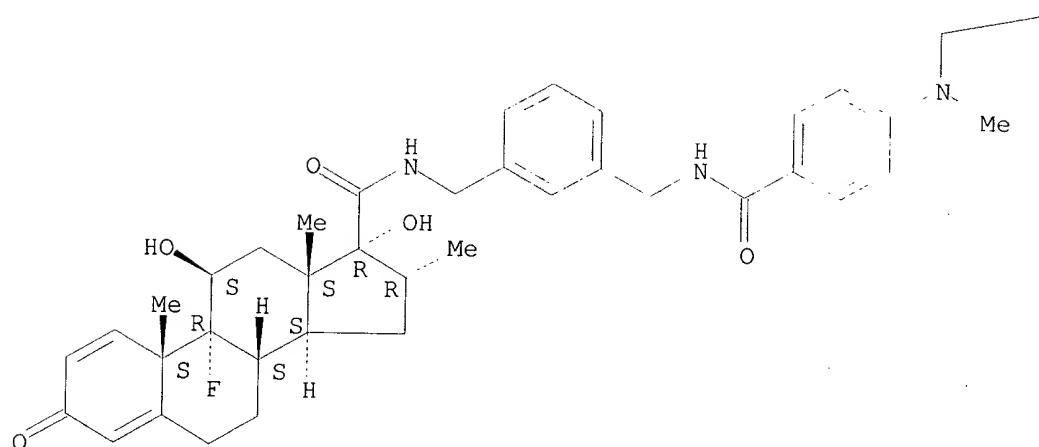


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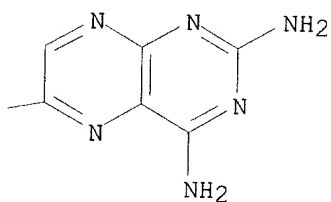
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(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



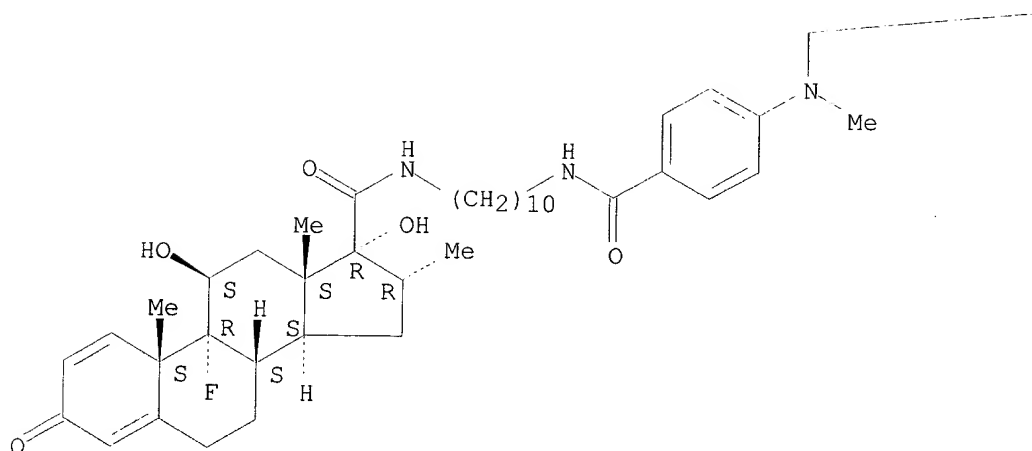
PAGE 1-B



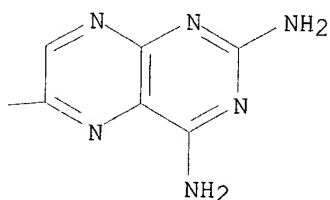
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

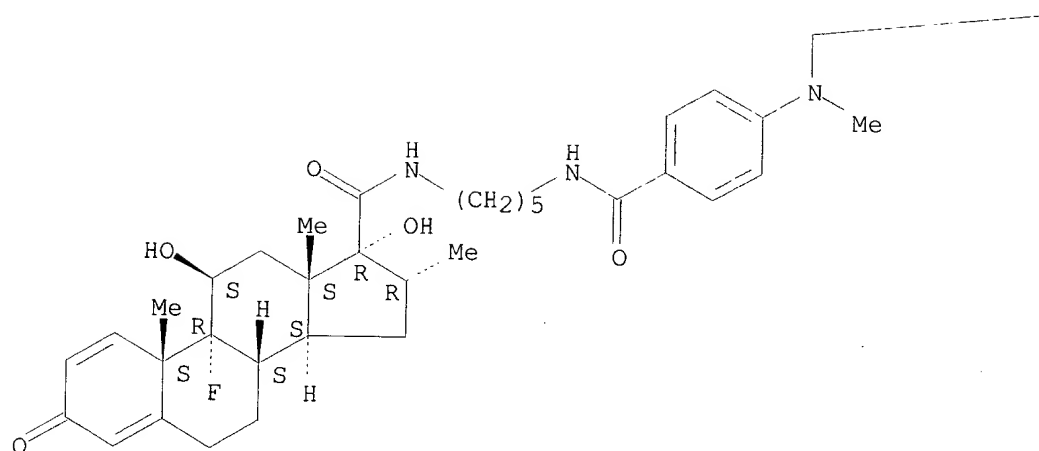


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 INDEX NAME)

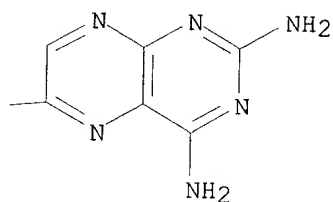
Absolute stereochemistry.



PAGE 1-A



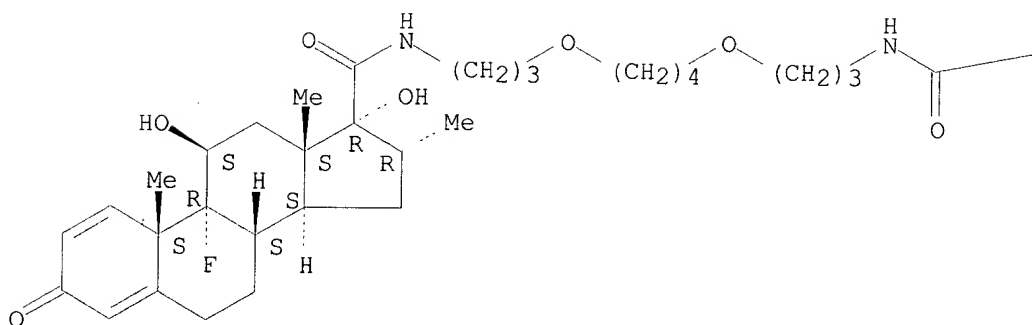
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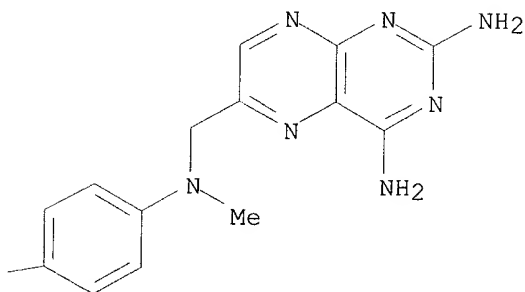
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 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



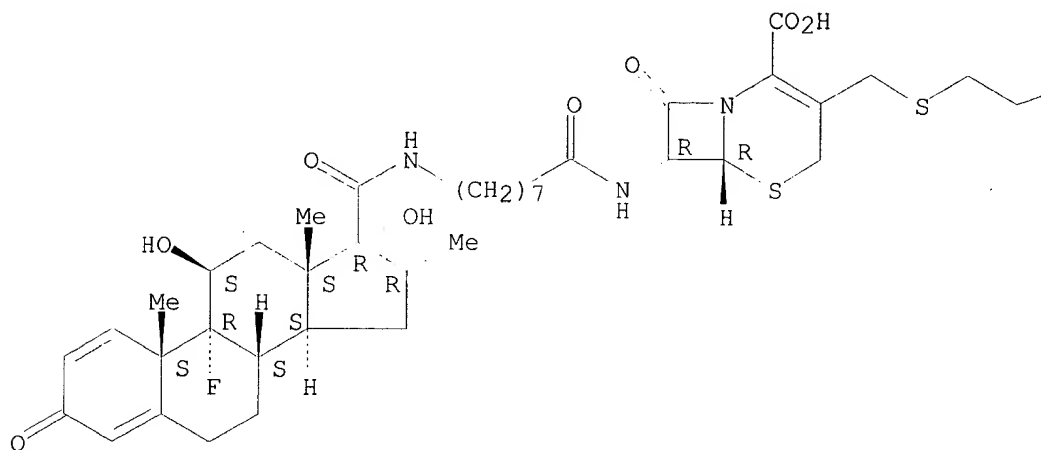
PAGE 1-B



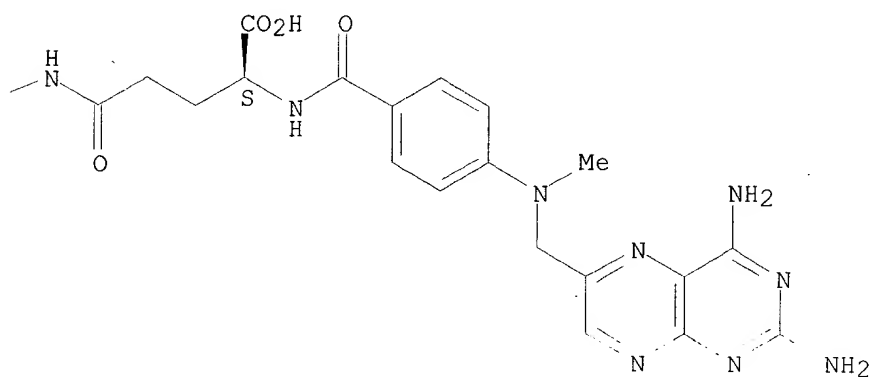
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 oxobutyl]amino]ethyl]thio]methyl]-7-[[8-[[[(11.beta.,16.alpha.,17.alpha.)-  
 9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrost-1,4-dien-17-  
 yl]carbonyl]amino]-1-oxooctyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

PAGE 1-A



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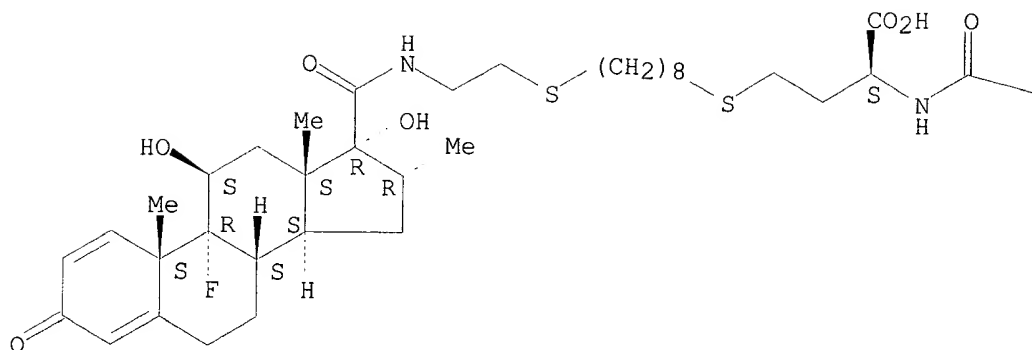


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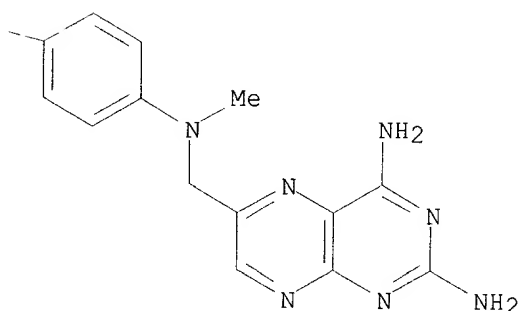
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Absolute stereochemistry.

PAGE 1-A



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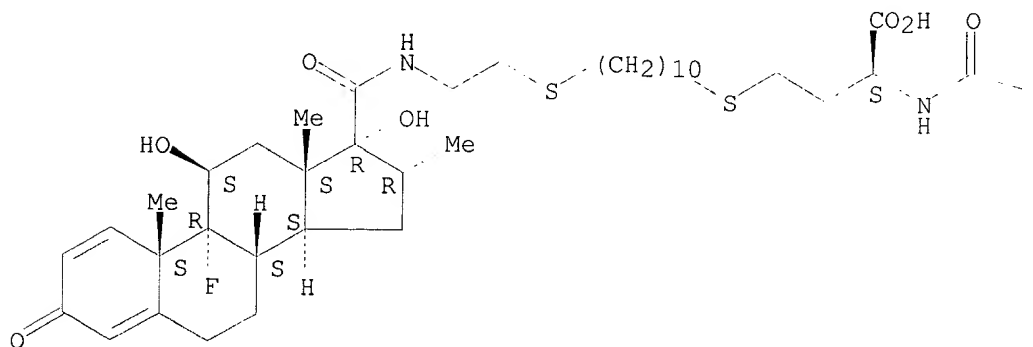


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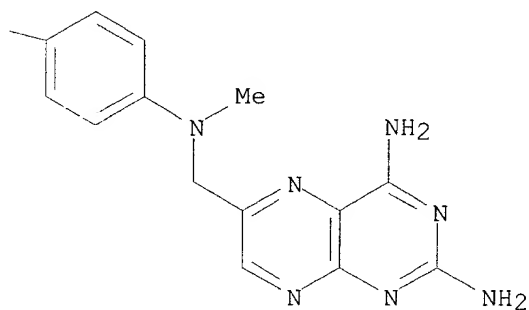
CN L-Homocysteine, N-[4-[[[(2,4-diamino-6-pteridiny)lmethyl]methylamino]benzoyl]-S-[10-[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrost-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]decyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L103 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:238920 HCAPLUS

DOCUMENT NUMBER: 133:86413

TITLE: Dexamethasone-Methotrexate: An Efficient Chemical Inducer of Protein Dimerization In Vivo

AUTHOR(S): Lin, Hening; Abida, Wassim M.; Sauer, Robert T.; Cornish, Virginia W.

CORPORATE SOURCE: Department of Chemistry, Columbia University, New York, NY, 10027, USA

SOURCE: Journal of the American Chemical Society (2000), 122(17), 4247-4248

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A heterodimeric dexamethasone-methotrexate compd. (Dex-Mtx) was prepd. that can dimerize proteins efficiently in vivo. A yeast three-hybrid system and a std. .beta.-galactosidase assay were used to show that Dex-Mtx (prepd. in 8 steps in 2% overall yield) can activate lacZ transcription in vivo.

IT 282092-90-4P

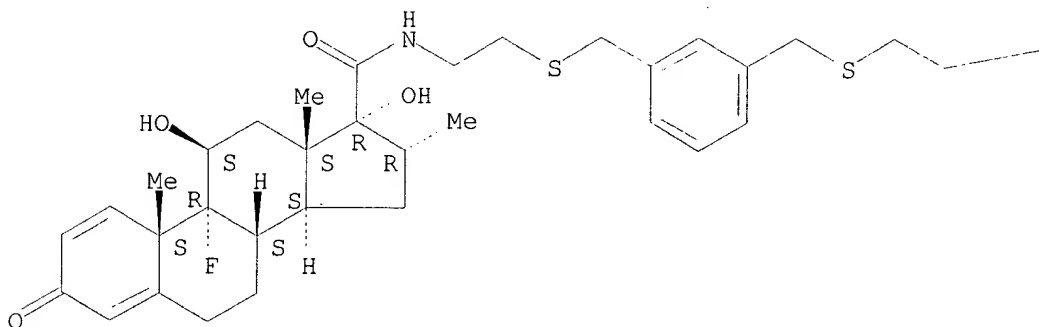
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); CAT (Catalyst use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(dexamethasone-methotrexate: efficient chem. inducer of protein dimerization In vivo)

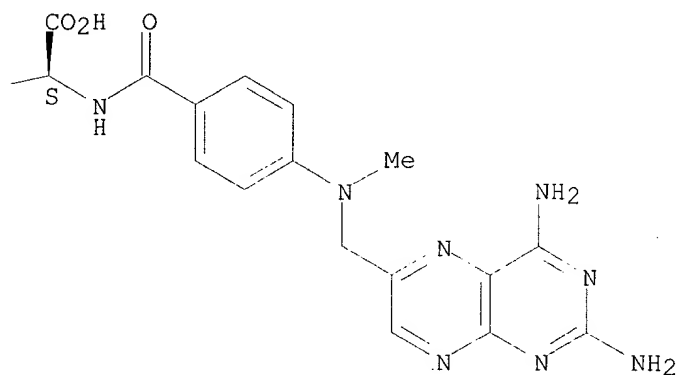
RN 282092-90-4 HCAPLUS

CN L-Homocysteine, N-[4-[[[(2,4-diamino-6-pteridiny]methyl)methylamino]benzoyl]-S-[[[3-[[[2-[[[(11.beta.,16.alpha.,17.alpha.)-9-fluoro-11,17-dihydroxy-16-methyl-3-oxoandrosta-1,4-dien-17-yl]carbonyl]amino]ethyl]thio]methyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT:

41

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT